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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,352	03/16/2004	Stephen R. Payne	TRA-129	3624

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EXAMINER	
MCLEAN, NEIL R	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/802,352	PAYNE ET AL.	
	Examiner	Art Unit	
	Neil R. McLean	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/25/2004; 8/30/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-6, 10-11, 14-16 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Teradaira et al. (US 6,457,884).

Regarding Claim 1:

A method for providing periodic status updates from a printer (e.g., Printer Mechanism 67 in Figure 5) to a host system (e.g., Host Computer 61 in Figure 5), comprising:

automatically sending printer status information (Column 7, lines 47-59; See Automatic Status Selection and Transmission Means 75 in Figure 5) from the printer to the host system at periodic time intervals (Column 7, lines 61-66; in particular: *"a timer interrupt process which is executed at regular intervals"*).

Regarding Claim 4:

A method in accordance with claim 1, wherein:

the status information comprises at least one of paper status, ink status, paper low, paper out, paper jam, ticket in path, top of form, barcode complete, validation field complete, field printed, and percentage of printing completed (e.g., The detection results from Error Detection Means 68 which is described in Column 7, lines 7-18 such as 'no paper' state).

Regarding Claim 5:

A method in accordance with claim 1, further comprising:

configuring at least one of the time interval and the status information via the host system (e.g., Automatic Status Selection sent from the Host computer described in Column 7, lines 47-50).

Regarding Claim 6:

A method in accordance with claim 1, further comprising:

storing at least one of the time interval and the status information in non-volatile memory of the printer (e.g., RAM 51 in Figure 4; Column 6, lines 15-21).

Regarding Claim 10:

A method in accordance with claim 1, wherein:

the host system comprises one of a cash register, a point of sale terminal, a slot machine, a gaming terminal, a lottery ticket machine, a transportation ticket vending machine, or an entertainment ticket vending machine (Column 1, lines

16-20).

Regarding Claim 11:

A printer (e.g., Printer Mechanism 67 in Figure 5) capable of providing periodic status updates to a host system e.g., Host Computer 61 in Figure 5), comprising:

means for generating printer status information (Column 7, lines 47-59; See Automatic Status Selection and Transmission Means 75 in Figure 5); and

means for automatically sending the printer status information to the host system at periodic time intervals (Column 7, lines 61-66; in particular: *"a timer interrupt process which is executed at regular intervals"*).

Regarding Claim 14:

A printer in accordance with claim 11, wherein:

the status information comprises at least one of paper status, ink status, paper low, paper out, paper jam, ticket in path, top of form, barcode complete, validation field complete, field printed, and percentage of printing completed (e.g., The detection results from Error Detection Means 68 which is described in Column 7, lines 7-18 such as 'no paper' state).

Regarding Claim 15:

A printer in accordance with claim 11, wherein:

at least one of the time interval and the status information is configured via the host system (e.g., Automatic Status Selection sent from the Host computer described in Column 7, lines 47-50).

Regarding Claim 16:

A printer in accordance with claim 11, further comprising:

non-volatile memory for storing at least one of the time interval and the status information at the printer (e.g., RAM 51 in Figure 4; Column 6, lines 15-21).

Regarding Claim 20:

A printer in accordance with claim 11, wherein:

the host system comprises one of a cash register, a point of sale terminal, a slot machine, a gaming terminal, a lottery ticket machine, a transportation ticket vending machine, or an entertainment ticket vending machine (Column 1, lines 16-20).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 2 and similar Claim 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teradaira et al.

Teradaira et al. discloses substantially the claimed invention as set forth in Claims 1 and 11 above.

Teradaira et al. does not disclose expressly wherein the periodic time intervals each comprise a constant time interval of between 5 seconds and 10 milliseconds.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to to obtain status updates by setting the periodic time intervals in constant time intervals of between 5 seconds and 10 milliseconds. Applicant has not disclosed that setting a constant time interval of between 5 seconds and 10 milliseconds provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with Teradaira et al.'s constant time interval because both perform substantially the same function of periodically obtaining a status update by setting the periodic time intervals in constant time intervals of between 5 seconds and 10 milliseconds.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the printing control method of Teradaira et al. to obtain the invention as specified in Claims 2 and 12.

4. Claims 3, 7-9, 13 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teradaira et al. as applied to claims 1 and 11 above, and further in view of Kai (US 5,943,503).

Regarding Claim 3 and similar Claim 13:

Teradaira et al. discloses the method of Claims 1 and 11 above:

Teradaira et al. does not disclose expressly the method in accordance with Claim 1, and the printer of Claim 11 wherein:

the periodic time interval is configurable.

Kai discloses wherein the periodic time interval is configurable (Column 1, lines 58-67).

Teradaira et al. & Kai are combinable because they are from the same field of endeavor of image processing; e.g., the host computer inquiring as to the various states of the printer.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a periodic time interval that is configurable.

The suggestion/motivation for doing so would have been to decide how many times one should receive a status update especially when taking into consideration the volume and throughput of the printing operation.

Therefore, it would have been obvious to combine Kai's configurable time interval with Teradaira et al.'s printing apparatus and control method to obtain the invention as specified in claims 3 and 13.

Regarding Claims 7-8 and similar Claims 17-18:

Teradaira et al. discloses the method of Claim 1 and printer of Claim 11:

Teradaira et al. does not disclose expressly wherein at least one of the time interval and the status information is provided from a removable device insertable into the printer.

Kai discloses wherein at least one of the time interval and the status information is provided from a removable device insertable into the printer (Column 10, lines 28-31).

Teradaira et al. & Kai are combinable because they are from the same field of endeavor of image processing; e.g., the host computer inquiring as to the various states of the printer.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have wherein at least one of the time interval and the status information is provided from a removable device insertable into the printer.

The suggestion/motivation for doing so would have been to have a small removable and rewritable memory in order to eliminate the need for larger forms of memory such as a fixed disk.

Therefore, it would have been obvious to combine Kai's removable non-volatile memory with Teradaira et al.'s printing apparatus and control method to obtain the invention as specified in claims 8 and 18.

Regarding Claim 9 and similar Claim 19:

Teradaira et al. discloses the method of claim 1 and claim 11, further comprising:

detecting an activity level at the printer (e.g., Column 7, lines 21-24 and Column 8, Table 1);

Teradaira et al. does not disclose expressly decreasing the periodic time interval when the activity level increases; and

increasing the periodic time interval when the activity level decreases.

Kai discloses expressly decreasing the periodic time interval when the activity level increases (Column 10, lines 44-48); and

increasing the periodic time interval when the activity level decreases (Column 10, lines 49-54).

Teradaira et al. & Kai are combinable because they are from the same field of endeavor of image processing; e.g., the host computer inquiring as to the various states of the printer.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to expressly decreasing the periodic time interval when the activity level increases; and

increasing the periodic time interval when the activity level decreases.

The suggestion/motivation for doing so would have been to decide how many times one should receive a status update especially when taking into consideration the volume and throughput of the printing operation and possible error situations.

Therefore, it would have been obvious to combine Kai's configurable time interval with Teradaira et al.'s printing apparatus and control method to obtain the invention as specified in claims 9 and 19.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Maekawa et al. (US 6,903,832) discloses an output control apparatus which controls an output unit to output an image based on output data. The output unit provides a condition change signal indicating a predetermined condition change.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. McLean whose telephone number is 571. 270.1679. The examiner can normally be reached on Monday through Friday 7:30AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on 571.272.7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

N. R. McLean

Neil R. McLean
12/14/2007

KING Y. POON
SUPERVISORY PATENT EXAMINER